REMARKS

Claim 65 is cancelled. Claims 55 and 59 are amended. New claims 72-74 are added. The originally-filed application supports the new claims at, for example, pages 6-7 and Fig. 4. Claims 51-59, 62-64 and 66-74 remain in the application. Reconsideration of the application in view of the amendments and the remarks to follow is requested.

Claim 65 stands rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification. Claims 51-54 and 63-65 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ueno (5,895,939) in view of Krivokapic et al. (6,008,094). Claims 55-58, 59, 62, and 66-71 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Komatsu et al. (4,516,147) in view of Wolf (vol 3).

Regarding the rejection against claim 65 based on §112, such claim is cancelled, and therefore, the rejection is moot.

Regarding the obviousness rejection against claim 51 based on the combination of Ueno and Krivokapic, such claim recites conductive lines having a generally uniform lateral width and each conductive line comprising a pitch relative to an adjacent conductive line wherein the pitches are equal. The Examiner correctly states that such limitations are not taught by Ueno and relies on Krivokapic to allegedly provide the deficiency in teachings of Ueno (page 3 of paper no. 17). However, the Examiner presents an improper motivational rationale for combining Ueno and Krivokapic, and therefore, the obviousness rejection fails.

The Examiner states Krivokapic teaches gate lines having a lateral width equal to lateral spacing between adjacent gate lines, and that it would be obvious to modify Ueno's device to have the Krivokapic structure in order to form a logic gate having symmetrical gate regions (Krivokapic refers to symmetric channel regions throughout the specification wherein Fig. 4 shows such as gate dimensions "Lg") (Page 3 of paper no. 17) (emphasis added). First, Krivokapic teaches away from forming symmetrical channel/gate regions and states, "symmetrical channel design approach...has limited applications and is considered adequate to channel lengths in the range of 0.25 μm, or greater. Further, the symmetrical approach does not allow the transistor designers to customize channel doping at the source and drain regions differently in MOS logic gate devices." (col. 4, lns. 1-15). Such teaching away is the antithesis of the art's suggesting that the person of ordinary skill go in the claimed direction. Essentially, teaching away from the art is a *per se* demonstration of lack of obviousness. *In re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988). Consequently, the motivational rationale provided by the Examiner to modify the Ueno device does not exist, and therefore, the obviousness rejection against claim 51 fails and should be withdrawn.

Moreover, the Examiner is respectfully reminded that if the proposed modification or combination of the prior art would change the principal of operation in the prior art invention being modified, then the teachings of the reference are not sufficient to render the claims *prima facie* obvious. MPEP §2143.01 (8th Edition) *citing to In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA

1959). The court in *In re Ratti* reversed a rejection holding the "suggested combination of references would require substantial reconstruction and redesign of elements shown in the [primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate" 270 F.2d at 813, 123 USPQ at 352. The Examiner is proposing modifying the Ueno device of Fig. 6 which is a JFET (junction-type FET) (Ueno at col. 9, lns. 57-67) by teachings of Krivokapic to a MOSFET (Fig. 4 of Krivokapic) (Page 3 of paper no. 17). JFET structure design and operational characteristics are different from a MOSFET (see for example, Ueno at col. 9, lns. 57-67 and col. 10, lns. 1-11). Consequently, Applicant submits that modifying the Ueno device by MOSFET teachings of Krivokapic would require substantial reconstruction and redesign of elements shown in the Ueno device as well as a change in the basic principle under which the Ueno device construction was designed to operate. Pursuant to the above authority, such a proposed modification of the Ueno device is inappropriate and not sufficient to render the claims *prima facie* obvious. Accordingly, the obviousness rejection against claim 51 fails for this additional reason and should be withdrawn. Independent claim 51 is allowable.

Claims 51-54, 63-65 and 72-74 depend from independent claim 51, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are not shown or taught by the art of record.

Regarding the obviousness rejection against claim 55 based on Komatsu and Wolf, such claim is amended to recite an entirety of a conductive material received directly over a diffusion region and a portion of the entirety of the conductive material laterally spaced from the conductive line. The originally-filed application supports such language at, for example, page 6 and Figs. 2 and 4. The combination of Komatsu and Wolf fails to teach or suggest a portion of the entirety of the conductive material laterally **spaced** from a conductive line as recited in claim 55. Consequently, the combination of Komatsu and Wolf fails to teach or suggest a positively recited limitation of claim 55, and therefore, claim 55 is allowable.

Claims 56-58 and 66-68 depend from independent claim 55, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are not shown or taught by the art of record.

For example, the Examiner rejects claims 66-67 stating that the recitation to the conductive line comprising "two conductive layers" fails to distinguish over the conductive line 48E of Komatsu "which can be **arbitrarily subdivided** into numerous sub-layers about each other" (page 5 of paper no. 17) (emphasis added). This is the exact type of rationale for an obviousness rejection that the Federal Circuit has stated is improper. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. MPEP §2143.01

(8th edition) *citing In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so". 916 F.2d at 682, 16 USPQ2d at 1432; MPEP §2143.01; See also *In re Finch*, 972 F.2d, 1260, 23 USPQ2d, 1780 (Fed. Cir. 1992). To suggest that a conductive line can be **arbitrarily subdivided** is the epitome of lacking the desirability, suggestion or motivation for modifying a reference to allegedly teach limitations of claims 66-67. Consequently, the obviousness rejection against claims 66-67 lacks the requisite motivational rationale for the modification of the art, and therefore, the rejection should be withdrawn. Claims 66-67 are allowable.

Regarding the obviousness rejection against claim 59 based on Komatsu and Wolf, such claim is amended to recite a second portion of the conductive material contacts the diffusion region **at only one location**. The originally-filed application supports such language at, for example, page 6 and Figs. 2 and 4. Wolf does not teach or suggest such limitation and Komatsu teaches a polycrystalline layer 49E contacting **two separate locations** of opposite sides of an emitter region 45 formed within substrate 40. Therefore, in no fair or reasonable interpretation does the combination of Komatsu and Wolf teach or suggest a second portion of the conductive material contacts the diffusion region **at only one location** as recited in claim 59. The combination of Komatsu and

Wolf fails to teach or suggest a positively recited limitation of claim 59, and therefore, claim 59 is allowable.

Claims 62 and 69-71 depend from independent claim 59, and therefore, are allowable for the reasons discussed above with respect to the independent claim, as well as for their own recited features which are not shown or taught by the art of record.

This application is now believed to be in immediate condition for allowance, and action to that end is respectfully requested. If the Examiner's next anticipated action is to be anything other than a Notice of Allowance, the undersigned respectfully requests a telephone interview prior to issuance of any such subsequent action.

Respectfully submitted,

Dated: 5-13-03

By: _____

D. Brent Kenady
Reg. No. 40,045